Permit No. TX0007048

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C... 1251 et. seq; the "Act"),

The Lubrizol Corporation P.O. Box 158
Deer Park, Texas 77536

is authorized to discharge from a facility located on Tidal Road in Harris County, Texas

to receiving waters named Patrick's Bayou; thence to the Houston Ship Channel in Segment No. 1006 of San Jacinto River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I (14 pages), II (6 pages), and III (6 pages) hereof.

This permit shall become effective on October 25, 1993

This permit and the authorization to discharge shall expire at midnight, January 15, 1995

signed and issued this 24th day of September 1993

prepared by

Allen T. Chang

Toxics Control Section

(6W-PT)

Myron O. Knudson P.E

Director

Water Management Division (6W)

9155429



PART I REQUIREMENTS FOR NPDES PERMITS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL 001

During the period beginning January 16, 1991 and lasting through the expiration date, the permittee is authorized to discharge from Outfall 001: treated process wastewater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations			
	Mass(lbs/day)		Other Uni	ts (mg/l)	
	Daily Avg	Daily Max	Daily Avg	Daily Max	
Flow (MGD)	N/A	N/A	Report	Report	
BOD ₅	104	194	N/A	N/A	
TSS	328	790	Ņ/A	N/A	
TOC	834	1488	N/A	N/A	
Oil & Grease	83	180	N/A	N/A	
Ammonia - N	96	192	n/a	N/A	
Acenaphthene	0.15	0.39	N/A	N/A	
Acrylonitrile	0.64	1.6	N/A	N/A	
Benzene	0.25	0.9	N/A	N/A	
Carbon Tetrachloride	0.12	0.25	N/A	N/A	
Chlorobenzene	0.1	0.19	N/A	N/A	
1,2,4-Trichlorobenzene	0.45 /	0.93	N/A	N/A	
Hexachlorobenzene	0.1	0.19	N/A	N/A	
1,2-Dichloroethane	0.45	1.4	N/A	N/A	
1,1,1-Trichloroethane	0.14	0.36	N/A	N/A	
Hexachloroethane	0.14	0.36	N/A	N/A	
1,1-Dichloroethane	0.15	0.39	N/A	N/A	
1,1,2-Trichloroethane	0.14	0.36	N/A	N/A	
Chloroethane	0.69	1.77	N/A	N/A	
Chloroform	0.14	0.3	N/A	N/A	
2-Chlorophenol	0.21	0.65	N/A	N/A	
1,2-Dichlorobenzene	0.51	1.08	N/A	N/A	
1,3-Dichlorobenzene	0.21	0.29	n/a	N/A	
1,4-Dichlorobenzene	0.1	0.19	N/A	N/A	
1,1-Dichloroethylene	0.11	0.17	N/A	N/A	
1,2-trans-Dichloroethylene	0.14	0.36	N/A	N/A	
2,4-Dichlorophenol	0.26	0.74	N/A	N/A	
1,2-Dichloropropane	1.01	1.52	N/A	N/A	

1,3-Dichloropropylene	0.19	0.29	N/A	N/A
2,4-Dimethylphenol	0.12	0.24	N/A	N/A
2,4-Dinitrotoluene	0.75	1.89	N/A	N/A
2,6-Dinitrotoluene	1.69	4.24	N/A	N/A
Ethylbenzene	0.21	0.72	N/A	N/A
Fluoranthene	0.17	0.45	N/A	N/A
Bis(2-Chloroisopropyl)Ether	1.99	5.01	N/A	N/A
Methylene Chloride	0.26	0.59	N/A	N/A
Methyl Chloride	0.57	1.26	N/A	N/A
Hexachlorobutadiene	0.13	0.32	N/A	N/A
Naphthalene	0.15	0.39	N/A	N/A
Nitrobenzene	0.18	0.45	N/A	N/A
2-Nitrophenol	0.27	0.46	N/A	N/A
4-Nitrophenol	0.48	0.82	N/A	N/A
2,4-Dinitrophenol	0.47	0.81	N/A	N/A
4,6-Dinitro-o-Cresol	0.52	1.83	N/A	N/A
Phenol	0.1	0.17	N/A	N/A
Bis(2-Ethylhexyl) Phthalate	0.68	1.85	N/A	N/A
Di-n-Butyl Phthalate	0.18	0.38	N/A	N/A
Diethyl Phthalate	0.54	1.34	N/A	N/A
Dimethyl Phthalate	0.13 ,	0.31	N/A	N/A
Benzo(a)anthracene	0.15	0.39	N/A	N/A
Benzo(a)pyrene	0.15	0.4	Ņ/A	N/A
3,4-Benzofluoranthene	0.15	0.4	N/A	N/A
Benzo(k)fluoranthene	0.15	0.39	N/A	N/A
Chrysene	0.15	0.39	N/A	N/A
Acenaphthylene	0.15	0.39	N/A	N/A
Fluorene	0.15	0.39	N/A	N/A
Phenanthrene	0.15	0.39	N/A	N/A
Pyrene	0.17	0.44	N/A	N/A
Tetrachloroethylene	0.15	0.37	N/A	N/A
Toluene	0.17	0.53	N/A	N/A
Trichloroethylene	0.14	0.36	N/A	N/A
Vinyl Chloride	0.69	1.77	N/A	N/A
Total Chromium	7.35	18.34	N/A	N/A
Total Copper	0.07	0.07	N/A	N/A
Total Cyanide	0.14	0.14	N/A	N/A
Total Lead	0.34	0.73	N/A	N/A
Total Nickel	0.31	0.65	N/A	N/A
Total Zinc	1.86	3.94	N/A	N/A
			/	,

DAILY AVERAGE MINIMUM(*2)

7-DAILY MINIMUM (*3)

Whole Effluent Lethality (7-Day NOEC) (*1)

Effluent Characteristic	Monitoring Requirements		
	Measurement	Sample	
	Frequency	<u>Type</u>	
Flow (MGD)	Continuous	Record	
BOD ₅	2/week	24-hr. composite	
TSS	2/week	24-hr. composite	
TOC	1/day	24-hr. composite	
Oil & Grease	2/week	Grab	
Temperature	3/day	In Situ	
Ammonia - N	1/week	24-hr. composite	
Acenaphthene	1/year	24-hr. composite	
Acrylonitrile	1/year	24-hr. composite	
Benzene	1/year	24-hr. composite	
Carbon Tetrachloride	1/year	24-hr. composite	
Chlorobenzene	1/year	24-hr. composite	
1,2,4-Trichlorobenzene	1/month	24-hr. composite	
Hexachlorobenzene	1/year	24-hr. composite	
1,2-Dichloroethane	1/year	24-hr. composite	
1,1,1-Trichloroethane	1/year	24-hr. composite	
Hexachloroethane	1/year	24-hr. composite	
1,1-Dichloroethane	1/year	24-hr. composite	
1,1,2-Trichloroethane	1/year	24-hr. composite	
Chloroethane	1/year	24-hr. composite	
Chloroform	1/year	24-hr. composite	
2-Chlorophenol	1/year	24-hr. composite	
1,2-Dichlorobenzene 1,3-Dichlorobenzene	1/year	24-hr. composite	
1,4-Dichlorobenzene	1/year	24-hr. composite	
1,1-Dichloroethylene	1/year	24-hr. composite	
<u> </u>	1/year	24-hr. composite	
1,2-trans-Dichloroethylene 2,4-Dichlorophenol	1/year 1/year	24-hr. composite	
1,2-Dichloropropane		24-hr. composite 24-hr. composite	
1,3-Dichloropropylene	1/year	-	
2,4-Dimethylphenol	1/year 1/year	24-hr. composite 24-hr. composite	
2,4-Dinitrotoluene	1/year	24-hr. composite	
2,6-Dinitrotoluene	1/year	24-hr. composite	
		24-hr. composite	
Ethylbenzene Fluoranthene	1/month 1/year	24-hr. composite	
Bis(2-Chloroisopropyl)Ether	1/year	24-hr. composite	
Methylene Chloride	1/year	24-hr. composite	
Methyl Chloride	1/year	24-hr. composite	
Hexachlorobutadiene	1/year	24-hr. composite	
Naphthalene	1/year	24-hr. composite	
Nitrobenzene	1/year	24-hr. composite	
2-Nitrophenol	1/year 1/year	24-hr. composite	
4-Nitrophenol	1/year 1/year	24-hr. composite	
2,4-Dinitrophenol	• =	 -	
z, a printitiobueinor	1/year	24-hr. composite	

4,6-Dinitro-o-Cresol	1/year	24-hr. composite
Phenol	1/week	24-hr. composite
Bis(2-Ethylhexyl) Phthalate	1/year	24-hr. composite
Di-n-Butyl Phthalate	1/year	24-hr. composite
Diethyl Phthalate	1/year	24-hr. composite
Dimethyl Phthalate	1/year	24-hr. composite
Benzo(a)anthracene	1/year	24-hr. composite
Benzo(a)pyrene	1/year	24-hr. composite
3,4-Benzofluoranthene	1/year	24-hr. composite
Benzo(k)fluoranthene	1/year	24-hr. composite
Chrysene	. 1/year	24-hr. composite
Acenaphthylene	1/year	24-hr. composite
Fluorene	1/year	24-hr. composite
Phenanthrene	1/year	24-hr. composite
Pyrene	1/year	24-hr. composite
Tetrachloroethylene	1/year	24-hr. composite
Toluene	1/week	24-hr. composite
Trichloroethylene	1/year	24-hr. composite
Vinyl Chloride	1/year	24-hr. composite
Total Chromium	1/year	24-hr. composite
Total Copper	1/month	24-hr. composite
Total Cyanide	1/month	24-hr. composite
Total Lead	1/month	24-hr. composite
Total Nickel	1/month	24-hr. composite
Total Zinc	1/week	24-hr. composite
Lethality (7-Day NOEC)		
Mysidopsis bahia	1/quarter	24-Hr. Composite
Menidia beryllina (*5)	1/quarter	24-Hr. Composite
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-, 1	· · · · · · · · · · · · · · · · · · ·

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored continuously (*4).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the parshall flume prior to discharge to Patrick's Bayou.

FOOTNOTES

(*1) Compliance with the Whole Effluent Lethality limitation is required on January 10, 1995. The No Observed Effect Concentration (NOEC) is defined as the greatest effluent dilution which does not elicit lethality that is statistically different from the control (0% effluent) at the 95% confidence level. The DAILY AVERAGE MINIMUM and the 7-DAILY MINIMUM whole effluent NOEC lethality values shall not be less than 27% effluent. See Part II, Whole Effluent Toxicity Testing Requirements.

- (*2) If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.
- (*3) The <u>lowest</u> NOEC test result for either species tested for the reporting period shall be submitted on the DMR as the 7-DAILY MINIMUM.
- (*4) See PART II.6.
- (*5) The permittee may substitute <u>Cyprinodon variegatus</u> where required by its current State permit. This substitution is hereby authorized only until such time as the current State permit toxics requirement is complete or expires. At that time, the permittee shall use <u>Menidia beryllina</u> for compliance with its NPDES toxicity testing requirements.

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 002, uncontaminated stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			
	Mass(lbs/day)		Other Units (mg/l)	
	Daily Avg	Daily Max	Daily Av	g Daily Max
Plan (MGP)	N / S	N/N	N / N	n
Flow (MGD)	N/A	N/A	N/A	Report
TOC	N/A	N/A	N/A	75 (*1)
Oil & Grease	N/A	N/A	N/A	15 (*1)
Total Zinc	N/A	N/A	N/A	2 (*1)

Effluent Characteristic	Monitoring Requirements			
	Measurement	Sample		
•	Frequency	Type		
Flow (MGD)	1/day (*2)	Instantaneous		
TOC	1/day (*2)	Grab		
Oil & Grease	1/day (*2)	Grab		
Total Zinc	1/day (*2)	Grab		

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*2) by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe entering Patrick's Bayou, at a point approximately 750 feet north of Outfall 001

- (*1) See PART II.3.
- (*2) See PART II.4.

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 003, uncontaminated stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			
	Mass(lb	s/day)	Other Un	its (mg/l)
	Daily Avg	Daily Max	Daily Avg	Daily Max
Flow (MGD)	N/A	N/A	N/A	Report
TOC	N/A	N/A	N/A	75 (*1)
Oil & Grease	N/A	N/A	N/A	15 (*1)
Total Zinc	N/A	N/A	N/A	2 (*1)
Effluent Characteristic		Monitoring	Requirement	<u>s</u>
		Measurement	Sam	ple
		Frequency	TY	<u>pe</u>
Flow (MGD)		1/day (*2)	Instanta	aneous
TOC		1/day (*2)	Grab	
Oil & Grease	٠.	1/day (*2)	Gra	ь
Total Zinc		1/day (*2)	Gra	b

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*2) by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe entering Patrick's Bayou at a point approximately 1650 feet north of Outfall 001

- (*1) See PART II.3.
- (*2) See PART II.4.

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 004, uncontaminated stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u> Discharge Limitations</u>				
	Mass(lb	s/day)	Other Units (mg/l)		
	Daily Avq	Daily Max	Daily Avg	Daily Max	
Flow (MGD)	N/A	N/A	N/A	Report	
TOC	N/A	N/A	N/A	75 (*1)	
Oil & Grease	.N/A	N/A	N/A	15 (*1)	
Total Zinc	N/A	N/A	N/A	2 (*1)	
Effluent Characteristic		Monitoring	<u>Requiremen</u>	<u>ts</u>	
••		Measurement	Sa	mple	
		Frequency	<u>T</u>	ype	
Flow (MGD)	· .	1/day (*2)	Instant	aneous	
TOC	•	1/day (*2)	Grab		
Oil & Grease		1/day (*2)	Gr	ab	
Total Zinc		1/day (*2)	Gr	ab	

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*2) by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe entering Patrick's Bayou at a point approximately 2450 feet north of Outfall 001

- (*1) See PART II.3.
- (*2) See PART II.4.

Grab

OUTFALL 005

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 005: emergency bypass of rainfall runoff and process wastewater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	<u>Discharge Limitations</u>				
	Mass(lbs/day)		Other	Other Units $(mg/1)$	
•	Daily Avg	Daily Max	Daily A	Avg Da	ily Max
Flow (MGD)	N/A	N/A	Report	Repo	ort
BOD ₅	N/A	N/A	N/A	20 (*	
TSS	N/A	N/A	N/A	170 (*	-
TOC	N/A	N/A	N/A	115 (*	•
Oil & Grease	N/A	N/A	N/A	15 (*	
Total Zinc	N/A	N/A	N/A	2 (*	-
Temperature (^O F)	N/A	N/A	N/A	120 (*	
Ammonia - N	N/A	N/A	N/A	15 (*	1)
Effluent Characteristic	cteristic Monitoring Requirement		nents	:	
		Measurement	Sample		
	•	Frequency	•	Type	-
Flow (MGD)		1/day (*2)	Inst	antaneou	S
BOD ₅		1/day (*2)		Grab	
TSS		1/day (*2)			
TOC		1/day (*2)	•	Grab	
Oil & Grease		1/day (*2)		Grab	
Temperature		1/day (*2)		Garb	•
		_ · · · · · ·			

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored continuously (*2).

1/day (*2)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe entering Patrick's Bayou at a point approximately 250 feet south and 1300 feet west of the northeast corner of plant property.

FOOTNOTES

Ammonia - N

- (*1) See PART II.3.
- (*2) See PART II.4.

Instantaneous

Grab

Grab

Grab

OUTFALL 006

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 006, uncontaminated stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				
	Mass(lbs/day)		Other Units (mg/l)		
	Daily Avg	Daily Max	Daily Avg	Daily Max	
Flow (MGD)	· N/A	N/A	N/A	Report	
TOC	N/A	N/A	N/A	75 (*1)	
Oil & Grease	N/A	N/A	N/A	15 (*1)	
Total Zinc	N/A	N/A	N/A	2 (*1)	
		. ,		•	
Effluent Characteristic	Monitoring Requirements				
•		Measurement	Sa	mple	
		Frequency	Ţ	ype	

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*2) by grab sample.

1/day (*2)

1/day (*2)

1/day (*2)

1/day (*2)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe entering Patrick's Bayou at a point approximately 1950 feet south and 740 feet west of the northern corner of plant property.

FOOTNOTES

Flow (MGD)

Total Zinc

Oil & Grease

TOC

- (*1) See PART II.3.
- (*2) See PART II.4.

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 007, uncontaminated stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	<u>Discharge Limitations</u>				
	Mass(lb	s/day)	Other Un	Other Units (mg/l)	
	Daily Avg	Daily Max	Daily Avg	Daily Max	
Flow (MGD)	N/A	N/A	N/A	Report	
TOC	N/A	N/A	N/A	75 (*1)	
Oil & Grease	N/A	N/A	N/A	15 (*1)	
Total Zinc	N/A	N/A	N/A	2 (*1)	
•	•			•	
Effluent Characteristic	Monitoring Requirements				
	,	Measurement	San	nple	
		Frequency	T	<u>rpe</u>	
Flow (MGD)		1/day (*2)	Instant	aneous	
TÓC		1/day (*2)	Gra	ab .	
Oil & Grease		1/day (*2)	Gra	l b	
Total Zinc		1/day (*2)	Grab		

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*2) by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall pipe from the stormwater retention pond before it enters the East Branch of Patrick's Bayou.

- (*1) See PART II.3.
- (*2) See PART II.4.

SECTION B. SCHEDULE OF COMPLIANCE

I. EFFLUENT LIMITATIONS COMPLIANCE SCHEDULE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

None

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

II. WHOLE EFFLUENT TOXICITY LIMITATIONS COMPLIANCE SCHEDULE

- a. The permittee shall achieve sustained compliance with the Whole Effluent Lethality Limitations effective January 10, 1995.
 - The permittee shall initiate and/or continue ongoing activities to include Toxicity Reduction Evaluations (TREs) in accordance with EPA protocols designed to achieve sustained compliance with Whole Effluent Lethality limitations:
 - The permittee shall submit Progress Reports in the months of April and October outlining the status of the activities undertaken and planned to resolve the toxic discharge. Progress Reports shall include at a minimum summary of findings, corrective actions required, and data generated and shall continue until compliance is achieved.
- b. No later than 14 calendar days following the date for compliance with the Whole Effluent Lethality limitations, the permittee shall notify the EPA in writing of its compliance or noncompliance.

SECTION C. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III.D.4 of the permit. Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report form postmarked no later than the <u>25th</u> day of the month following the completed reporting period.